

We claim:

1. An apparatus for treating at least one of a plurality of disorders of a patient attributable at least in part to neural activity, said apparatus comprising:
  - a stimulation electrode adapted for placement on a nerve of a patient at a stimulation site;
  - a stimulation signal generator for generating a stimulation signal at said stimulation electrode and selected to electrically stimulate a nerve to induce bi-directional propagation of nervous impulses in a stimulated nerve;
  - a blocking member for placement on said nerve at a blocking site and creating localized conditions at said blocking site that at least partially diminish transmission of nerve impulses past said blocking site.
2. An apparatus according to claim 1 wherein said blocking member includes a drug-delivery member for delivery of a pharmacologic lock at said blocking site.
3. An apparatus according to claim 1 wherein said blocking member is an electrically controlled blocking member.
4. An apparatus according to claim 3 wherein said blocking member is cryogenic.
5. An apparatus according to claim 3 wherein said blocking member creates and electrical signal at said blocking site with an electrical frequency selected to at least partially diminish said transmission.
6. An apparatus according to claim 1 comprising a controller for selectively controlling parameters of said blocking and said stimulation.
7. An apparatus according to claim 6 wherein said controller is implantable within said patient's body.

8. An apparatus according to claim 6 wherein said controller is inductively coupled to said stimulation electrode and said blocking member to electrically controlling said electrode and member remote from an interior of said patient's body.
9. An apparatus according to claim 1 wherein said blocking member is one of at least two blocking members for disposition on said nerve on opposite sides of said stimulation electrode.
10. An apparatus according to claim 1 wherein said nerve is a vagus nerve.
11. An apparatus according to claim 6 including a sensor to sense a physiologic parameter of an organ and said controller connected to said sensor to regulate said blocking in response to said sensed parameter.
12. A method for treating at least one of a plurality of disorders of a patient, said method comprising:
  - electrically stimulating a vagus nerve of said patient at a stimulation site with a stimulation signal selected to have a therapeutic effect on a target organ;
  - applying an electrical blocking signal to said vagus nerve at a blocking site on a side of said stimulation site opposite said target organ;
  - said blocking signal selected to at least partially block nerve impulses to a second organ on a side of said blocking site opposite said stimulation site.
13. A method according to claim 12 wherein said blocking signal is variable by a controller to regulate transmission nerve impulses past said blocking site.
14. A method according to claim 13 comprising sensing a physiologic parameter of said second organ and regulating said blocking signal in response to said sensed parameter.

15. A method according to claim 14 wherein said target organ is a gastro-intestinal organ and said second organ is a heart.
16. A method according to claim 15 wherein said disorder is any one of a plurality of gastrointestinal diseases.
17. A method according to claim 14 wherein said target organ is a brain and said second organ is a heart.
18. A method according to claim 17 wherein said disorder is any one of a plurality of diseases associated with the central nervous system.
19. A method according to claim 18 wherein said disease is selected from a group including dementia, schizophrenia, depression, borderline personality disorder, epilepsy and Parkinson's disease.